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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,985	04/20/2005	Klaus Stoeckl	66489-049	5949

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EXAMINER

YUN, JURIE

ART UNIT	PAPER NUMBER
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2882

MAIL DATE	DELIVERY MODE
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11/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/531,985	STOECKL, KLAUS	
	Examiner	Art Unit	
	Jurie Yun	2882	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6 and 17 is/are rejected.
- 7) ☒ Claim(s) 7,8 and 10-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed 9/25/07 has been entered.

Claim Objections

2. Claim 2 is objected to because of the following informalities: in line 1, either -- the-- or --said-- should be inserted after "wherein". Appropriate correction is required.
3. Claims 1, 7, and 16 are objected to because of the following informalities: in lines 4 and 5 of each of claims 1, 7, and 16, the phrase "can be" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d). It is suggested to replace "can be" with "is". Also, the means for the holding member being located in a directionally stable position relative to the X-ray device should be claimed, as well as the means for the plate being pivoted (e.g. a pivot). Appropriate correction is required.
4. Claims 1, 7, and 16 are objected to because of the following informalities: in line 10 of each of claims 1, 7, and 16, there is lack of antecedence for "the occlusal system". Appropriate correction is required.
5. Claim 7 is objected to because of the following informalities: in line 13, after "said holding member," perhaps --the rail-- should be inserted to avoid ambiguity as to which element has the opening. As written, it appears as though the pivoted plate has the opening. Appropriate correction is required.
6. Claim 10 is objected to because of the following informalities: the claim should be amended to read better (e.g. "wherein said bite piece comprises a soft material.").

7. Claim 11 is objected to because of the following informalities: the claim should be amended to read better (e.g. "wherein said bite piece consists of a substantially radiolucent material.").

8. Claim 12 is objected to because of the following informalities: the claim should be amended to read better (e.g. "wherein said bite piece consists of closed-cell ethylene foam.").

Drawings

9. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for the holding member being located in a directionally stable position relative to the X-ray device as claimed in claims 1, 7, and 16 must be shown or the feature(s) canceled from the claim(s). Also, the means for indicating the angular position of the pivoted plate as claimed in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 2, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molteni et al. (USPN 6,424,694 B1) in view of Schantz (USPN 2,123,210) and Arai et al. (USPN 6,118,842).

12. With respect to claim 1, Molteni et al. disclose a bite device (Fig. 7, 14) for correct positioning of a patient for taking a radiograph with a panoramic X-ray device (12a) comprising a holding member (11) that is located in a directionally stable position relative to said X-ray device, and a plate (Fig. 8, 13) that is pivoted relative to said holding member (see Figs. 8a & 8b) and which exhibits a bite piece (14) on which the patient bites.

Molteni et al. disclose indicia (100) used to help align any of the vernier adjustments taught (column 5, lines 45-47), the indicia disposed in a region of the

occlusal system which is free from X-ray irradiation when the radiograph is taken, but do not specifically disclose the indicia is used for detecting the angle of deflection α between said plate and said holding member, as is correlated with the degree of inclination of the occlusal plane. Schantz discloses means (Fig. 4) for detecting the angle of deflection α between said plate and said holding member, as is correlated with the degree of inclination of the occlusal plane, which means are disposed in a region of the occlusal system which is free from X-ray irradiation when the radiograph is taken (column 1, lines 1-52 & column 2, lines 31-55). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Molteni et al. to provide means for detecting the angle of deflection α between said plate and said holding member, as is correlated with the degree of inclination of the occlusal plane, which means are disposed in a region of the occlusal system which is free from X-ray irradiation when the radiograph is taken, in order to produce distortion free images and to enable reproducing the images taken from the same angle in the future for comparison purposes, as taught by Schantz. Molteni et al. as modified by Schantz disclose means (Schantz - Fig. 4) for indicating the angular position of the pivoted plate.

Molteni et al./Schantz do not disclose driving means for vertical adjustment of said holding member and pivoting said plate. Arai et al. disclose driving means for vertical adjustment of said holding member (column 7, line 53 - column 8, line 6 & column 16, lines 26-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Molteni et al./Schantz to have driving means provided for vertical adjustment of said holding member, which vertical

adjustment would pivot said plate, to ensure accurate positioning and thus better imaging.

13. With respect to claim 2, Molteni et al. as modified by Schantz disclose said means for detecting the angle of deflection α comprise one or more sensors (Schantz - Fig. 4) disposed in said holding member.

14. With respect to claims 5 and 6, Arai et al. disclose said driving means move said plate automatically into a predefined angular position and stop when said predefined angular position is attained (column 7, line 53 - column 8, line 6 & column 16, lines 26-32), wherein said driving means indicate when said predefined angular position of said plate is attained by means of optical and/or acoustic signals (Fig. 29, 373).

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molteni et al. (USPN 6,424,694 B1) in view of Schantz (USPN 2,123,210) and Arai et al. (USPN 6,118,842) as applied to claim 1 above, and further in view of Levy (USPN 5,327,477).

16. With respect to claim 17, Molteni et al. as modified by Schantz and Arai et al. do not disclose said bite piece is provided with a replaceable protective sheath. Levy discloses this (column 8, lines 1-2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Molteni et al./Schantz/Arai et al. to provide the bite piece with a replaceable protective sheath, as taught by Levy, to protect the patient.

Allowable Subject Matter

17. Claims 7, 8, and 10-16 would be allowable if rewritten or amended to overcome the objections set forth above in this Office action. The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to disclose a bite device for correct positioning of a patient for taking a radiograph with a panoramic X-ray device, wherein said pivoted plate is connected to a rail which is disposed in said holding member; the rail being capable of being moved upwardly and downwardly and has an opening for the purpose of detecting the position of said rail by detector means, as claimed in claim 7. Claim 8 is allowable due to its dependency on claim 7.

Prior art fails to disclose a bite device for correct positioning of a patient for taking a radiograph with a panoramic X-ray device, wherein said bite piece is replaceable, and has, on opposite sides thereof, a wedge-shaped tapered projection and a complementary recess for the accommodation of said projection for releasably fitting said bite piece to said pivoted plate, as claimed in claim 16. Claims 10-15 are allowable due to their dependency on claim 16.

Response to Arguments

18. Applicant's arguments filed 9/25/07 have been fully considered but they are not persuasive. Applicant argues, "Molteni et al. disclose a positioning apparatus and method for transversal dental X-ray tomography. However, the positioning device is not used in a panoramic X-ray device for taking a panoramic picture but in dental X-ray transversal tomography, see col. 4, line 21 to 33."

In response to Applicant's argument that Molteni et al. do not disclose the positioning device is used for taking a panoramic x-ray, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It is noted also that the positioning device of Molteni et al. is taught to be panoramic x-ray equipment (column 2, line 36).

Applicant also argues, "Schantz discloses a holder of a X-ray film to take an intraoral exposure, thus no panoramic image. The film is inside the mouth and it is possible to detect the angular position to the holder. It is not the plate which exhibits the bite piece which is pivoted, but the support frame of the film is pivoted."

However, this is not persuasive because Schantz was only relied upon for the teaching of means for indicating an angular position. It is obvious also that although Molteni et al. do not specifically disclose this, it is provided. Molteni et al. disclose (column 4, lines 63-67):

It would be appreciated, that the positioning shown in FIGS. 8-11, can be achieved for example by vernier adjusting mechanisms, although any adjusting mechanism is within the scope of the invention.

Figures 8a and 8b show the plate being pivoted with respect to the holder. Schantz specifically teaches means for detecting an angular position. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this teaching of detecting an angular position, to the positioning device of Molteni et al., in

order to be able to reproduce the images taken in the same position in the future. This is only possible by knowing the angular position.

Applicant also argues, "The teaching of Arai et al. involves positioning the device in the directions x, y and z. There are no means to pivot the bite device." This is not persuasive because Arai et al. was only relied upon for teaching driving means for vertical adjustment. When applied to Molteni et al., this would pivot the bite device.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jurie Yun whose telephone number is 571 272-2497. The examiner can normally be reached on Monday-Friday 8:30-5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Julie Yun
Examiner
Art Unit 2882

November 2, 2007